RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

09/517.49/A
, IFW/6
4/12/05

ENTERED



IFW16

RAW SEQUENCE LISTING DATE: 04/12/2005
PATENT APPLICATION: US/09/517,491A TIME: 14:20:54

Input Set : A:\ABPI-P06-036.TXT

Output Set: N:\CRF4\04122005\I517491A.raw

5 6 7 9 12 14 15 17 18 20	6 Cottarel, Guillaume																
	<1512 <1602								5-21						Ą		
	<170								awob	Ver	sion	4.0					
	<210																
	<2112				36												
	<2123 <2133				Mous	se											
	<220																
33	<2212	> NA	ME/E	KEY:	CDS												
	<222					(4	486)										
	<400		~														4.0
	ctc a																48
39	Leu 1	TIIT	Arg	птѕ	5 ASII	Ата	MIG	ASII	гуу	10	ьеи	гу	ASII	мес	15	GIU	
-	cac a	agc	aac	acq	_	atc	caq	caq	acc		atq	ata	aqt	gaa		cta	96
	His S																
43				20					25					30			
	att d	-															144
	Ile A	Arg		Ala	Ile	Leu	Trp		Glu	Met	Trp	His		Gly	Leu	Glu	
47	gag g	702	35	000	++~	t a C	+++	40	a 2 a	200	220	at a	45	aac	ata	+++	192
	Glu A																172
51		50		9		-1-	55	1		9		60		1			
53	gag g	gtg	ctg	gag	ccc	ctg	cat	gct	atg	atg	gaa	cgg	ggt	ccc	cgg	act	240
54	Glu \	Val	Leu	Glu	Pro		His	Ala	Met	Met		Arg	Gly	Pro	Arg		
55	65					70					75					80	000
	ctg a																288
58 59	Leu I	гуѕ	GIU	Int	Ser 85	rne	ASI	GTU	AIG	90	дту	ALG	АБР	ьeu	ме с 95	GIU	
	gca d	caa	σaa	taa		cga	aaσ	tac	atα		tca	aaa	aac	atc	-	gac	336
	Ala																
63				100	-		-	-	105			_		110	-	_	

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```
65 ctc acq caa gcc tgg gac ctc tac tat cac gtg ttc aga cgg atc tca
                                                                      384
66 Leu Thr Gln Ala Trp Asp Leu Tyr Tyr His Val Phe Arg Arg Ile Ser
                               120
67
           115
69 aag cag cta ccc cag ctc aca tcc ctg gag ctg cag tat gtg tcc ccc
                                                                      432
70 Lys Gln Leu Pro Gln Leu Thr Ser Leu Glu Leu Gln Tyr Val Ser Pro
                           135
73 aaa ctt ctq atq tqc cqa qac ctt qaq ttq qct qtq cca qqa aca tac
                                                                      480
74 Lys Leu Leu Met Cys Arg Asp Leu Glu Leu Ala Val Pro Gly Thr Tyr
75 145
                       150
                                            155
                                                                      486
77 gac ccc
78 Asp Pro
82 <210> SEQ ID NO: 2
83 <211> LENGTH: 162
84 <212> TYPE: PRT
85 <213> ORGANISM: Mouse
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88 Leu Thr Arg His Asn Ala Ala Asn Lys Ile Leu Lys Asn Met Cys Glu
90 His Ser Asn Thr Leu Val Gln Gln Ala Met Met Val Ser Glu Glu Leu
                                   25
92 Ile Arg Val Ala Ile Leu Trp His Glu Met Trp His Glu Gly Leu Glu
94 Glu Ala Ser Arg Leu Tyr Phe Gly Glu Arg Asn Val Lys Gly Met Phe
                           55
96 Glu Val Leu Glu Pro Leu His Ala Met Met Glu Arg Gly Pro Arg Thr
                       70
                                           75
98 Leu Lys Glu Thr Ser Phe Asn Gln Ala Tyr Gly Arg Asp Leu Met Glu
100 Ala Gln Glu Trp Cys Arg Lys Tyr Met Lys Ser Gly Asn Val Lys Asp
                100
                                    105
102 Leu Thr Gln Ala Trp Asp Leu Tyr Tyr His Val Phe Arg Arg Ile Ser
            115
                                120
                                                     125
104 Lys Gln Leu Pro Gln Leu Thr Ser Leu Glu Leu Gln Tyr Val Ser Pro
                           135
                                                140
106 Lys Leu Met Cys Arg Asp Leu Glu Leu Ala Val Pro Gly Thr Tyr
107 145
                        150
                                            155
                                                                 160
108 Asp Pro
112 <210> SEQ ID NO: 3
113 <211> LENGTH: 40
114 <212> TYPE: DNA
115 <213> ORGANISM: Artificial Sequence
117 <220> FEATURE:
118 <223> OTHER INFORMATION: oligonucleotide
120 <400> SEQUENCE: 3
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123 <210> SEQ ID NO: 4
124 <211> LENGTH: 34
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126 <213> ORGANISM: Artificial Sequence
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PATENT APPLICATION: US/09/517,491A TIME: 14:20:54

Input Set : A:\ABPI-P06-036.TXT

Output Set: N:\CRF4\04122005\I517491A.raw

128	8 <220> FEATURE:																
129	<223	3> O:	THER	INF	ORMA'	FION:	ol:	igonı	ıcle	otide	€						
				NCE:													
					_	at to	ccagt	tttta	a gaa	ac							34
	<210> SEQ ID NO: 5																
	<211> LENGTH: 348																
	S <212> TYPE: DNA																
	7 <213> ORGANISM: Homo sapiens																
	9 <220> FEATURE:																
	0 <221> NAME/KEY: CDS																
	1 <222> LOCATION: (14)(325)																
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	44 ggaatteeta ata atg tee gta caa gta gaa ace ate tee eea gga gae														49		
145																	
146					1				5					10			
								ggc									97
	Gly	Arg		Phe	Pro	Lys	Arg	Gly	Gln	Thr	Cys	Val		His	Tyr	Thr	
150			15					20					25				
								aaa									145
	Gly		Leu	Glu	Asp	Gly	_	Lys	Phe	Asp	Ser		Arg	Asp	Arg	Asn	
154		30					35					40					100
								ggc									193
	-	Pro	Phe	Lys	Phe		Leu	Gly	Lys	GIn		Val	He	Arg	GLY	_	
158	45					50					55					60	0.41
								agt									241
	GIu	GLu	GTA	vaı		Gin	мет	Ser	vaı	_	GIn	Arg	Ата	ьys		Thr	
162					65					70					75		200
								ggt									289
166	тте	ser	PIO	80	ıyı	Ald	ıyı	Gly	85	1111	GTA	птѕ	PLO	90	тте	TTE	
			aa+		2 a t	at a	~+ ~	ttc		~+ ~	~~~	a++	at a		- ~ ~		335
				_			_	Phe	_		-		CLa	aaacı	-99		333
170	FIO	FIU	95	ΑΙα	1111	ъеп	Val	100	тэр	Val	GIU	neu					
	aat/	racoo	gga 1	tcc				100									348
				D NO:	. 6												310
				H: 10													
			YPE:		7 4												
					Home	o say	oi ens	9									
				NCE:		Ju	, L C11.	,									
						Glu	Thr	Ile	Ser	Pro	Glv	Asp	Glv	Ara	Thr	Phe	
181	1	DCI	• • •	0111	5	Olu	****	110	001	10	O. J	110P	01,	9	15	2110	
		Lvs	Ara	Glv	_	Thr	Cvs	Val	Val		Tur	Thr	Glv	Met		Glu	
183	110	y ->	1119	20	0111	****	Oy S	· u.i.	25	****	- y -		~± y	30	204		
	Asp	Glv	Lvs		Phe	Asp	Ser	Ser		Asp	Ara	Asn	Lvs		Phe	Lvs	
185	135P	O L y	35	- y 3		7.5p		40	**** 9	1.50	9		45	0	2 110	-,5	
	Phe	Met		Glv	Tive	Gln	Glu	Val	Tle	Ara	Glv	Tro		Glu	Glv	Val	
187	1110	50	Lcu	O ± Y	-73	0111	55	• 44	-10	· · · · · · · · · · · ·	~± y	60	u	Q_LU	O+ 3		
	Ala		Met	Ser	Val	Glv		Arg	Ala	Lvs	Leu		Ile	Ser	Pro	Asp	
189		0111				70	~	9		10	75					80	
						. 3					. •						

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Input Set: A:\ABPI-P06-036.TXT

Output Set: N:\CRF4\04122005\I517491A.raw

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PATENT APPLICATION: US/09/517,491A TIME: 14:20:54

Input Set : A:\ABPI-P06-036.TXT

Output Set: N:\CRF4\04122005\1517491A.raw

256				20					25					30			
258	gag	cct	att	ctg	aag	gca	tta	att	ttg	aaa	ctg	aaa	gat	cca	gac	cct	144
				_	_	Āla			_		_		_		-		
260			35		_			40		-		_	45		_		
262	gat	cca	aac	cca	ggt	gtg	atc	aat	aat	gtc	ctg	gca	aca	ata	gga	gaa	192
263	Asp	Pro	Asn	Pro	Gly	Val	Ile	Asn	Asn	Val	Leu	Ala	Thr	Ile	Gly	Glu	
264		50					55					60					
266	ttg	gca	cag	gtt	agt	ggc	ctg	gaa	atg	agg	aaa	tgg	gtt	gat	gaa	ctt	240
267	Leu	Ala	Gln	Val	Ser	Gly	Leu	Glu	Met	Arg	Lys	Trp	Val	Asp	Glu	Leu	
268	65					70					75					80	
					_	gac	_		_	_			_	_	_		288
	Phe	Ile	Ile	Ile		Asp	Met	Leu	Gln	_	Ser	Ser	Leu	Leu		Lys	
272					85					90					95		
		_		-	-	tgg		-		_	_		_	_			336
	Arg	Gln	Val		Leu	Trp	Thr	Leu	_	Gln	Leu	Val	Ala		Thr	Gly	
276				100					105					110			204
						tac											384
	Tyr	vaı		GLu	Pro	Tyr	Arg	_	Tyr	Pro	Thr	Leu		Glu	vaı	Leu	
280			115					120					125				420
	_			_	_	act		_		_			_	-		-	432
284	ьeu	130	Pne	Leu	гÀг	Thr	135	GIII	ASII	GIII	GTÀ	140	Arg	Arg	GIU	Ala	
	a+ a		a+ a	++>	aaa	ctt		~~~	act	++~	ast		t 2.0	224	C2.C	222	480
		_				Leu			_	_	_			_			400
	145	mg	Vai	пси	ОТУ	150	пси	CLY	nia	пси	155	LLO	ı yı	цуз	1113	160	
		aac	att	aac	atα	ata	gac	caq	tcc	caa		acc	tct	act	atc		528
						Ile											
292				1	165		F			170	· · · ·				175		
294	ctq	tca	qaa	tcc	aaq	tca	agt	caq	gat	tcc	tct	gac	tat	agc	act	agt	576
						Ser											
296				180	_				185					190			
298	gaa	atg	ctg	gtc	aac	atg	gga	aac	ttg	cct	ctg	gat	gag	ttc	tac	cca	624
299	Glu	Met	Leu	Val	Asn	Met	Gly	Asn	Leu	Pro	Leu	Asp	Glu	Phe	Tyr	Pro	
300			195					200					205				
						gcc											672
	Ala		Ser	Met	Val	Ala		Met	Arg	Ile	Phe		Asp	Gln	Ser	Leu	
304		210					215					220					
						atg	-	-	_	-						_	720
		His	His	His	Thr	Met	Val	Val	Gln	Ala		Thr	Phe	Ile	Phe	-	
	225					230					235					240	7.60
		_				tgt		_		_		_	_	_		_	768
	Ser	Leu	GIY	ьeu	_	Cys	vaı	GIN	Pne		Pro	GIN	vaı	мет		Thr	
312	++-	a++		~+~	245	~~~	~+ ~	+~+	~~+	250	~~~	a + a	~~~	~~~	255	++~	016
						cga											816
315	rne	ьeu	ASII	260	тте	Arg	val	Cys	265	GT Å	WIG	тте	Arg	270	rne	теп	
	tta	cac	cac		aa s	atg	++~	ata		+++	ata	227	age		ato	ace	864
						Met											304
320	1116	O±11	275	L-u	O _T y	1100	Leu	280	OGI	r 116	+ u i	כעב	285		110	9	
520			213					200					200				

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 04/12/2005 PATENT APPLICATION: US/09/517,491A TIME: 14:20:55

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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:19; N Pos. 59,64,72,74,89,94,101,137,158,175,190,201,207,210,213,218
Seq#:19; N Pos. 234,243,257,283,286,289,292,314,325,328,335,352,361,380,384
Seq#:19; N Pos. 390,393,403,411,413,427,432,435,440,443,450,452,460,465,480
Seq#:19; N Pos. 482,486,492,515
Seq#:23; N Pos. 27,373,443,461,483,485,507,583,588,593,605,606,607,612,624
Seq#:23; N Pos. 625,626,627,628,630,631,632,635,639,646,652,659,661
Seq#:24; Xaa Pos. 105
Seq#:25; N Pos. 112,148,158,171,178,182,191,194,203,204
Seq#:29; N Pos. 3,9,15
Seq#:30; N Pos. 3,6,21

VERIFICATION SUMMARY

DATE: 04/12/2005 PATENT APPLICATION: US/09/517,491A TIME: 14:20:55

Input Set : A:\ABPI-P06-036.TXT

Output Set: N:\CRF4\04122005\I517491A.raw

L:1157 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:19 L:1158 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:0 M:341 Repeated in SeqNo=19 L:1214 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:0 M:341 Repeated in SeqNo=23 L:1250 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24 after pos.:96 L:1264 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order! L:1268 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:25 L:1270 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25 after pos.:60 M:341 Repeated in SeqNo=25 L:1312 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order! L:1316 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:29 L:1317 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29 after pos.:0 L:1327 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order! L:1331 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:30

L:1332 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30 after pos.:0